

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-12. (canceled).

13. (currently amended) A storage system for protecting data on a physical volume at the file system level and permitting access to the data at the physical volume level comprising:

a network attached storage (NAS) gateway; and

a storage system, which is ~~connected to said NAS~~ coupled to a plurality of servers both through said NAS gateway and not through said NAS gateway,

wherein said NAS gateway comprises:

a first interface for file level I/O,

a third interface for block level I/O, and

a first controller which processes file level I/O requests,

wherein said storage system comprises:

a second interface for block level I/O, said second interface being connected to said third interface,

a plurality of physical volumes upon which file systems are represented, and

a second controller which processes block level I/O requests,

wherein, in response to a file system protect request directed to a particular file system with a specified period of time, the particular file system is protected for the specified period of time and a physical volume of the particular file system is also protected for the specified period of time,

wherein once the particular file system is protected, write requests to the particular file system or physical volume of the particular file system via either the first or second controller are not permitted until expiration of the specified period of time,

wherein information regarding whether or not the particular file system is protected is stored in a volume status table having a plurality of entries which indicate statuses of the particular file system, and

wherein said entries include a first status indicating a retention period for the particular file system, the retention period indicating how long data in the particular file system should remain unchanged and thereby determining when data can next be written to the particular file system,

wherein said volume status table is stored in both said NAS gateway and said storage system.

wherein if said NAS gateway receives a file system protect request against said particular file system, via said third interface, said first controller changes a volume status among said plurality of entries indicating statuses of said particular file system to restrict access.

wherein if said NAS gateway receives a file system permit request against said particular file system, via said third interface, said first controller changes a volume status among said plurality of entries indicating statuses of said particular file system to permit access if the specified period of time has expired for said volume, and

wherein when said storage system receives an access from a server other than through said NAS gateway, said storage system processes the access if said status of the corresponding volume is not protected.

14-16. (canceled).

17. (currently amended) ~~[[A]]~~The storage system according to claim 13, wherein said entries indicate a second status of each file system defining whether the file system is protected or unprotected.

18. (currently amended) ~~[[A]]~~The storage system according to claim 13, wherein said entries indicate a second status of each file system defining whether the file system is exported or un-exported.

19-20. (canceled).

21. (currently amended) ~~[[A]]~~The storage system according to claim 13, wherein said first controller is a network attached storage controller which processes file level I/O requests, and

wherein in response to said file system protect request, said first controller sets the information corresponding to said specified period of time to said volume status table for said particular file system and sets the information corresponding to said specified period of time to said volume status table for said physical volume of said particular file system.

22. (currently amended) ~~[[A]]~~The storage system according to claim 13, wherein said second controller is a disk controller which processes block level I/O requests, and

wherein in response to a file system delete request, said first controller checks a status of a specified file system and statuses of all the corresponding physical volumes of said file system, and if a shredding is required said first controller deletes all the data on the physical volumes by shredding, and if a shredding is not required said first controller places said physical volumes to a free volume pool.

23. (currently amended) ~~[[A]]~~The storage system according to claim 13, wherein said first interface is an Ethernet interface which processes file level I/O requests.

Appl. No. 10/802,853
Amendment dated June 8, 2009
Reply to Office Action of March 6, 2009

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24. (currently amended) ~~[[A]]~~The storage system according to claim 13, wherein said second interface is a Fibre Channel interface which processes block level I/O requests.

25-35. (canceled).